

Director, participating in Departmental and Center activities (seminars, programs, recruitment), and teaching.

3. Prior to joining U.N.C., I was on the faculty at Duke University, where I taught and practiced obstetrics and gynecology in the School of Medicine and bioethics at the Trent Center for Bioethics, Humanities, and History of Medicine. My responsibilities at Duke included patient care (general gynecology, directing Miscarriage Clinic), teaching students and residents, and conducting research.

4. I am licensed to practice medicine in North Carolina and am a fellow of the American College of Obstetricians and Gynecologists. I graduated from Duke University Medical School with an M.D. in 1995 and from Georgetown University with an M.A. in Philosophy in 2004. I have authored or co-authored numerous publications on issues in bioethics. My experience and credentials both in obstetrics and gynecology and in bioethics are set forth in more detail on my curriculum vitae, a true and accurate copy of which is attached hereto as Exhibit A.

5. In forming the opinions expressed in this declaration, I relied on my years of personal experience treating and consulting with patients and on knowledge I have obtained through my training, my ongoing review of professional literature, my discussions with colleagues, and my attendance at conferences related to the topics discussed below.

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North Carolina's Woman's Right to Know Act

6. I have reviewed North Carolina's Woman's Right to Know Act (HB 854) and have discussed it with Plaintiffs' attorneys. I understand that the Act adds abortion-specific requirements for obtaining informed consent from a patient (in Section 90-21.82) and adds a "display of real-time view requirement" (in Section 90-21.85). I understand that Section 90-21.85 imposes the following new obligations on abortion providers: (a) the physician who is to perform an abortion or a "qualified technician" (as defined in the Act) must perform "an obstetric real-time view of the unborn child" (as defined in the Act) on the pregnant woman at least four hours before the abortion; (b) that person must "display the images so that the pregnant woman may view them;" (c) that person must provide to the pregnant woman a "simultaneous explanation of what the display is depicting, which shall include the presence, location, and dimensions of the unborn child within the uterus and the number of unborn children depicted;" (d) that person must provide the pregnant woman "medical description of the images, which shall include the dimensions of the embryo or fetus and the presence of external members and internal organs, if present and viewable;" and (e) that person must obtain a written certification from the pregnant woman, in which she "shall indicate whether or not she availed herself of the opportunity to view the image." (Section 90-21.85(a)) Section 90-21.85 also states that it shall not "be construed to prevent a pregnant woman from averting her eyes

from the displayed images or from refusing to hear the simultaneous explanation and medical description.” (Section 90-21.85(b))

7. Section 90-21.85 obligates physicians to subject patients to an experience -- of visual images of the fetus and explanations of images -- which the patients have chosen not to undergo. Such a requirement violates the most basic principles of medical ethics, undermines informed consent and the informed decision-making process, and inflicts significant harm on the physician-patient relationship.

8. A central tenet of medical ethics is that the physician may not act upon the patient without her consent.

9. Similarly fundamental is the mandate of respect for patient autonomy.

10. Respecting patient autonomy means viewing the patient as someone who can make decisions for herself, and includes the obligation on the part of the practitioner to ensure that the patient can act on her own decisions and values, and to avoid taking action contrary to the patient's wishes or ignoring, insulting or demeaning the patient's rights of autonomy [see Beauchamp and Childress, *Principles of Biomedical Ethics*. New York: Oxford University Press, 5th ed. 2001].

11. The purpose of the informed consent process is to ensure that the patient's consent consists of an informed and autonomous decision and to make it possible to respect the individual patient's views about what she wants to do.

12. The practitioner's role in helping a patient make an informed decision about medical care is to provide the patient with information that will allow the patient to

make an autonomous choice. This includes material factual information about the nature of the proposed procedure, the patient's indications for the procedure, the procedure's medical risks and benefits, and alternatives to the procedure.

13. Values and beliefs also may be discussed in the context of the patient's informed decision-making in response to an expressed desire or need for such discussion by the patient, but forced discussion of values may alternatively disrespect autonomy. When a patient declines discussion of matters of value, it is not appropriate for a physician to interject her own value-based views, those of the government or of any other third party into the patient's decision-making process. To do so would violate the ethical requirement of respect for the patient's autonomy.

14. The extent and nature of the information given to the patient in the context of informed decision-making should be tailored to the particular patient's needs and concerns. The physician must listen to the patient to discern what information is material and helpful to her, and must aim to provide the level and type of information that will optimize her understanding and respect her autonomy.

15. If a patient says that she does not want to receive particular information, that decision must be respected. Providing a patient with information she has said that she does not want to receive disrespects the patient's autonomy and has the potential to undermine her ability to make a choice consistent with her values.

16. To the extent Section 90-21.85 requires a physician to subject a patient to an experience or information that the patient has declined to accept, the law will be

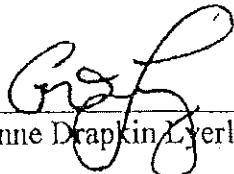
detrimental to the physician-patient relationship and the patient's care. Specifically, it will put the patient in a position of protecting or defending herself against something her physician is doing or saying to her. This would be an unwarranted intrusion into a personal process, and it would create a difficult dynamic of distrust for the provision of health care to a patient.

17. Section 90-21.85 threatens the *fiduciary duty* owed to patients by physicians, by virtue of their professional role. This duty requires the physician to act in the patient's interests (as those interests have been expressed by a competent patient) and to seek to ensure that the patient is safe.

18. Section 90-21.85 forces physicians to violate not only the principle of respect for autonomy but also the principle of non-maleficence, the duty not to inflict harm on a patient. Subjecting a patient to an unwanted experience of receiving visual and auditory information about the fetus in advance of an abortion has the potential to inflict harm and directly violate the obligation to avoid harming the patient. Section 90-21.85 does not allow for physician discretion or any exceptions to avoid putting physicians in the position of harming their patients.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on September 27, 2011



Anne Drapkin Lyerly, M.D., M.A.

CURRICULUM VITAE

ANNE DRAPKIN LYERLY, MD, MA

Associate Professor, Social Medicine
Associate Director, Center for Bioethics
University of North Carolina at Chapel Hill

333 South Columbia Street
CB#7240, 333 MacNider Hall
Chapel Hill, NC 27599-7240
(919) 962-6735
FAX: (919) 962-2154
alyerly@email.unc.edu

EDUCATION

MD, Duke University Medical School, Medicine, 1995
MA, Georgetown University, Philosophy, 2004
BA, Dartmouth College, English, High Honors, cum laude, 1991

ACADEMIC APPOINTMENTS

Associate Professor, University of North Carolina Department of Social Medicine, 2011-
Associate Director, University of North Carolina Center for Bioethics, 2011-
Adjunct Associate Professor, University of North Carolina Department of Obstetrics and Gynecology, 2011-
Associate Professor, Duke University Department of Obstetrics and Gynecology, 2007-2010
Assistant Professor, Duke University Department of Obstetrics and Gynecology, 2001-2007
Member of the Graduate Faculty, Arts and Sciences, Duke University, 2010
Faculty Affiliate, Duke Center for Women's Studies, 2001-2010
Core Faculty, Trent Center for Bioethics, Humanities, and History of Medicine, 2001-2010
Instructor, Johns Hopkins Department of Gynecology and Obstetrics, 1999-2001

PROFESSIONAL TRAINING/FELLOWSHIPS

Residency, Obstetrics and Gynecology, Duke University, 1995-1999
Greenwall Fellowship in Bioethics and Health Policy, Johns Hopkins/Georgetown, 1999-2001

HONORS AND AWARDS

Josiah Charles Trent Scholar Award in Medical Humanities, Duke University, 2009
Center for Genome Ethics Law and Policy Research Fellowship Award, Duke University, 2001
American College of Obstetricians and Gynecologists (ACOG) District IV Annual Meeting, First
prize for oral presentation, "Cervical Intraepithelial Neoplasia in HIV-Infected Women in a
Southeastern US Population.", 1995

Johnathan B. Rintels Prize for the most outstanding Honors thesis in the humanities and social sciences at Dartmouth: "Wif and Wapned: the Contrasexual Creative Imagination of the *Beowulf* Poet," 1991
Albert Feinstein '55 Memorial Award for Outstanding Work in English Honors, Dartmouth College, 1991
Dartmouth College Academic Citations: General Physics, Milton, 1990

GRANTS

Greenwall Foundation Presidential Award, PI [19,750], A qualitative study of individuals' attitudes regarding their own cryopreserved embryos, 2001-2004
National Institutes of Health BIRWCH Scholar Award, Scholar [225,000], Fertility Patients' Attitudes about their Cryopreserved Embryos, 2004-2005
Josiah Charles Trent Memorial Foundation, Duke University, PI [3750], The Obstetrics and Gynecology Risk Research Group, 2004-2005
Greenwall Foundation Faculty Scholars Program, PI [278,129], Individuals Attitudes Regarding their Cryopreserved Embryos, 2004-2007
National Institutes of Health (NIH) K-01 Mentored Scientist Development Program in Research Ethics, PI [513,000], Ethical Issues Regarding Women in Health Research, 2004-2010
SSIRRC Standard Research Grant - co-I; Kukla PI [100,565], Autonomy and the Negotiation of Information on Reproductive Health Care, 2006-2009
Provost's Commonfund Award, Duke University - co-I; Wilkinson PI [48,500], Ethical Issues in Maternal Birth Trauma in the Developing World, 2006-2007
Charles Hammond Fund, Duke University, PI [22,436], The Miscarriage Care Project, 2008-2009.
The Doctors Company Foundation - co-I; Gallagher PI [129,879] Talking to Parents About Birth Injuries, 2009-2011
Charles Hammond Fund, Duke University, co-PI with Swamy [4900], Assessing Decision Making and Acceptance of H1N1 Inactivated Influenza Vaccine Administered in a Research Setting During Pregnancy, 2009-2010

PUBLICATIONS

REFEREED ARTICLES

Drapkin AL, Livingston EG, Dodge R, Coogan AC, Herbert WNP. Cervical Intraepithelial Neoplasia in HIV-Infected Women in a Southeastern US Population. *Southern Medical Journal* 1997;90:893-896.

Hansard LJ, Healy-Gardner BE, **Drapkin AL**, Bentley RC, McLachlan JA, Walmer D. Human Endometrial Transforming Growth Factor- α : A Transmembrane, Surface Epithelial Protein That Transiently Disappears During the Midsecretory Phase of the Menstrual Cycle. *Journal of the Society of Gynecologic Investigation* 1997 4(3): 160-6.

Lyerly AD, Anderson J. Human Immunodeficiency Virus and Assisted Reproduction: Reconsidering Evidence, Reframing Ethics. *Fertility and Sterility* 2001;75:843-58.

Lyerly AD, Mahowald M. Maternal-Fetal Surgery: The Fallacy of Abstraction and the Problem of Equipoise. *Health Care Analysis* 2001, 9(2):151-165.

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Page 2 of 15

Lyerly AD, Myers ER, Faden RR. The Ethics of Aggregation and the Case of Hormone Replacement Therapy. *Health Care Analysis* 2001; 9(2):187-211.

Lyerly AD, Gates E, Cefalo RC, Sugarman J. Toward the Ethical Evaluation and Use of Maternal-Fetal Surgery. *Obstetrics and Gynecology* 2001; 98:689-97.

Lyerly AD, Cefalo RC, Socol M, Fogarty L, Sugarman J. Attitudes of Maternal-Fetal Specialists Concerning Maternal-Fetal Surgery. *American Journal of Obstetrics and Gynecology* 2001; 185:1052-8.

Lyerly AD, Mahowald MB. Maternal-Fetal Surgery for Myelomeningocele. *Clinics in Perinatology* 2003;30:155-65.

Lyerly AD, Faden RR. HIV and Assisted Reproduction: Women and Healthcare Policy. *American Journal of Bioethics* 2003;3(1):41-2.

Lyerly AD. Achieving Equipose in Maternal-Fetal Surgery. *American Journal of Obstetrics and Gynecology*, 2003;188(3):854-5.

Lyerly AD, Rothman BK. Paternalism or Misuse of Power? *Virtual Mentor: American Medical Association Journal of Ethics* 2004 6(2): <http://www.ama-assn.org/ama/pub/category/11845>.

Lyerly AD, Schwartz, P. Is the patient always right? *Hastings Center Report*. March/April 2004; 34(2): 13-14.

Bankowski B, Lyerly AD, Faden RR, Wallach E. The Social Implications of Embryo Cryopreservation. *Fertility and Sterility* 2005; 84(4):823-32.

Sugarman JS, Lyerly AD, Kurtzberg J. Untying the Gordian Knot: Policies, Practices, and Ethical Issues Related to Banking of Umbilical Cord Blood. *Journal of Clinical Investigation* 2005;115(10):2592-7.

Committee on Ethics, American College of Obstetricians and Gynecologists (**Lyerly AD**, committee author). Committee Opinion #321: Maternal Decision Making, Ethics, and the Law. *Obstetrics and Gynecology* 2005; 106(5):1127-37.

Lyerly AD. Shame, Gender and Birth. *Hypatia*. Winter 2006; 21(1):101-18.

Lyerly AD, Steinhauser K, Nancy E, Tulsky JA, Cook-Deegan R, Sugarman J, Walmer D, Faden RR, Wallach E. Factors that Affect Infertility Patients' Decisions about Frozen Embryos. *Fertility and Sterility* 2006; 85(6):1620-30.

Lyerly AD, Mitchell LM, Kukla R, Kuppermann M, Armstrong B, Harris L, Little M. Risks, Values and Decision Making Surrounding Pregnancy, *Obstetrics and Gynecology* 2007;109(4):979-84.

Lyerly AD, Faden RR. Willingness to Donate Frozen Embryos for Stem Cell Research. *Science* 2007; 317:46-7.

Committee on Ethics, American College of Obstetricians and Gynecologists (Lyerly AD, committee author). Committee Opinion # 385. The Limits of Conscientious Refusal in Reproductive Medicine. *Obstetrics and Gynecology* 2007; 110: 1203-12.

Lyerly AD. Reframing Neutral Counseling. *Virtual Mentor: American Medical Association Journal of Ethics* 2008;10(10) 635-639.

Lyerly, AD, Little MO, Faden RR. A Critique of the 'Fetus as Patient.' *American Journal of Bioethics* 2008; 8:42-44.

Lyerly AD, Little M, Faden R. The Second Wave: Toward Responsible Inclusion of Pregnant Women in Research. *International Journal of Feminist Approaches to Bioethics*, 2008; 1(2):5-22.

Little M, Lyerly AD, Mitchell LM, Armstrong E, Harris L, Kukla R, Kuppermann M. Mode of Delivery: Toward Responsible Inclusion of Patient Preferences. *Obstetrics and Gynecology* 2008;112(4):913-8.

Brown S, Lyerly AD, Little M, Lantos J. Pediatrics-Based Fetal Medicine: Unanswered Ethical Questions. *Acta Paediatrica* 2008; 97(12):1617-19.

Lyerly AD, Steinhauer K, Voils C, Namey E, Alexander C, Bankowski B, Cook-Deegan R, Dodson W, Jungheim E, Gates E, McGovern W, Myers ER, Osborn B, Schlaff W, Sugarman J, Tulskey J, Walmer D, Faden RR, Wallach E. Fertility Patients' Preferences for Frozen Embryo Disposition: Results of a Multi-Institutional U.S. Survey, *Fertility and Sterility* 2008; epub December 2.

Lyerly AD, Little MO, Faden RR. Pregnancy and Clinical Research. *Hastings Center Report* 2008;38(6):53.

The Obstetrics and Gynecology Risk Research Group: Kukla R, Kuppermann M, Little M, Lyerly AD, Mitchell LM, Armstrong EM, Harris LH. Finding Autonomy in Birth. *Bioethics*, 2009; 23(1):1-8.

Roclands J, Jamison MG, Lyerly AD, James A. Consequences of Smoking During Pregnancy on Maternal Health. *Journal of Women's Health* 2009; 18(6):867-872.

Minkoff H, Lyerly AD. 'Doctor, What Would You Do?' *Obstetrics and Gynecology* 2009 113(5):1137-9.

Lyerly AD, Little M, Faden R. The National Children's Study: A Golden Opportunity to Advance the Health of Pregnant Women, *American Journal of Public Health*. 2009; 99:1742-5.

Lyerly AD, Mitchell LM, Armstrong EM, Harris LH, Kukla R, Kuppermann M, Little M. Risk and the Pregnant Body. *Hastings Center Report* 2009; 39(6): 34-42.

Little M, Lyerly AD, Faden R. Pregnant Women and Medical Research: A Moral Imperative. *Bioethics Forum* 2009;2:60-5.

Lyerly AD. Marking the Fine Line: Ethics and the Regulation of Innovative Technologies in Reproductive Medicine. *Minnesota Journal of Law, Science and Technology* (Rising Stars Issue) 2010;11(2):685-712.

Nancey E, **Lyerly AD**. The Meaning of Control for Childbearing Women in the US. *Social Science and Medicine* 2010, 71(4):769-76.

Lyerly AD, Little M. Toward an Ethical Approach to Vaginal Birth After Cesarean. *Seminars in Perinatology* 2010;34:337-44.

Minkoff H, **Lyerly AD**. Samantha Burton and The Rights of Pregnant Women Twenty Years After in Re AC. *Hastings Center Report* 2010, 40(6):13-5.

Lyerly AD, Nakagawa S, Kuppermann M. Decisional Conflict and the Disposition of Cryopreserved Embryos: Implications for Informed Consent. *Human Reproduction* 2011, 26(3):646-54.

Wilkinson J, **Lyerly AD**, Hayat S, Prabhu M. Ethical Dilemmas in Women's Health in Under-Resourced Settings. *International Journal of Gynecology and Obstetrics* 2011, 113(1):25-7.

Little M., **Lyerly AD**, Faden R. Moving Forward with Research Involving Pregnant Women: A Critical Role for Wisdom from the Field. *American Journal of Bioethics – Primary Research* 2011, 2(1): 15-17.

Lyerly AD, Little M, Faden R. Reframing the Framework: Toward Responsible Inclusion of Pregnant Women as Participants in Research. *American Journal of Bioethics* 2011, 11(5):50-1.

Harris LH, Cooper A, Rankinski K, Curlin F, **Lyerly AD**. Obstetrician-Gynecologists' Objections to and Willingness to Help Patients Obtain an Abortion. *Obstetrics and Gynecology* 2011, 118(4):905-912.

OTHER ARTICLES

Lyerly AD, "Innovation in Reproductive Medicine including the Assisted Reproductive Technologies and Maternal-Fetal Medicine." A background paper produced for the National Bioethics Advisory Commission, August 2000.

Lyerly, AD. Ethical Dilemmas of Inclusion in Clinical Studies. *Science Meets Reality: Recruitment and Retention of Women in Clinical Studies, and the Critical Role of Relevance: A Report of the Taskforce Sponsored by the NIH Office for Research in Women's Health*. 2003. National Institutes of Health: Bethesda MD; 88-90.

Lyerly AD, Breisford E, Bankowski B, Faden R, Wallach E. A qualitative study of individuals' attitudes regarding their cryopreserved embryos. In: Daya S. and Gunby J. Research Papers in Fertility and Reproductive Medicine. Proceedings of the 18th World Congress on Fertility and Sterility (IFFS 2004) *International Congress Series* 2004, vol 1271C, 353-356.

PUBLISHED NOTE OR ABSTRACT

Armstrong EM, Harris LH, Kukla R, Kuppermann M, Little M, **Lyerly AD**, Mitchell LM for the Obstetrics and Gynecology Risk Research Group. Caffeine in Pregnancy? *American Journal of Obstetrics and Gynecology* 2008, epub July 29, e13.

BOOK CHAPTERS

Drapkin A, Hage ML. "Women, Substance Abuse and Pregnancy," In: *Women's Health: A Teaching Guide to Psychosocial Issues*, APGO, 2/2000.

Lyerly AD. Revision of: Rosenfeld, Alan and Iden, Sara. Abortion: Medical Perspectives. In: Post, Stephen (editor) *Encyclopedia of Bioethics*, 3rd edition 2004, New York: Macmillan Reference, USA.

Lyerly AD. Revision of: Walters, LeRoy. Fetal Research. In: Post, Stephen (editor) *Encyclopedia of Bioethics*, 3rd edition 2004, New York: Macmillan Reference, USA.

Lyerly AD. Perspective of an Obstetrician-Gynecologist. In: Spandorfer, Pohl, Rattner, and Nasca (editors) *Professionalism in Medicine: A Case-Based Guide for Medical Students* 2009, New York: Cambridge University Press.

Lyerly AD. Ethics in Academic Medicine. In: Rayburn WF and Schulkin J (editors) *The Changing Landscape of Academic Obstetrics and Gynecology* 2011, New York: Springer. 147-161.

Little M, **Lyerly AD**, Faden R. Pregnant Women and Medical Research: A Moral Imperative (excerpted from *Bioethics Forum*, 2009). In: Emanuel FJ, Crouch RA, Arras JD, Grady C, Moreno JD (editors) *Ethical and Regulatory Aspects of Clinical Research: Readings and Commentary*, 2nd edition 2011, Baltimore, Johns Hopkins University Press, in press.

Lyerly AD. Issues in Reproduction. In: Hester M. and Schonfeld TL (editors) *Guidance for Healthcare Ethics Committees* 2011, Cambridge UK: Cambridge University Press, in press.

BOOK REVIEW

Lyerly AD. "Test Tube Families: Why the Fertility Market Needs Regulation" by Naomi Cahn (book review). *New England Journal of Medicine* 2009; 361(4):429-430.

OP-EDS

Anne Drapkin Lyerly. An embryonic give and take. *The News and Observer*, Raleigh, NC, January 23, 2006.

Anne Drapkin Lyerly and Ruth R. Faden. What Fertility Patients Want. *The News and Observer*, Raleigh, NC, July 27, 2007.

Ruth R. Faden, **Anne Drapkin Lyerly**, and Maggie Little. A Custom Drug. *The New York Times*, May 10, 2009.

Anne Drapkin Lyerly, Margaret Olivia Little and Ruth R. Faden. Pregnancy is No Time to Refuse a Flu Shot. *The New York Times*, September 29, 2009.

PRESENTATIONS AND ABSTRACTS

Hage ML, **Drapkin AL**, Tetel-Hanks J, Bushyhead A, Petrussa E. Teaching Difficult Subjects. APGO Annual Meeting, Orlando, FL, March 8-11, 1995.

Drapkin AL, Livingston EG, Packard M, Dodge R. Cervical Intraepithelial Neoplasia in HIV-Infected Women in a Southeastern Population, ACOG District IV Annual Meeting, Bermuda, September 30-October 3, 1995.

Hage ML, **Drapkin AL**, Tetel-Hanks J, Bushyhead A. "Caught In the Crossfire:" Drug Abuse and Pregnancy: A Strategy for Teaching Clinical Skills (video), 1995.

Drapkin AL and Myers ER. Temporal Discounting and Risk Aversion in Health States Related to Hormone Replacement Therapy: A Pilot Study. Duke University Medical Center Department of Obstetrics and Gynecology, Residents' Day, June 15, 1998.

Drapkin AL and Myers ER. Patient Preferences and Temporal Discounting in Health States Associated with Hormone Replacement Therapy: a Pilot Study. The Society for Medical Decision Making 20th Annual Meeting, Boston, October 26, 1998.

Lyerly AD, Sugarman J, Cefalo R., Socol M. Fetal Surgery: Survey of the Members of the Society for Maternal Fetal Medicine. Current Scientific, Ethical, Legal and Clinical Considerations of Fetal Surgery. National Institutes of Health, Bethesda, MD, July 16-18, 2000.

Bliton M, **Lyerly AD**, Wolf S (panelists). Fetal Surgery: Experimenting on Pregnant Women? American Society for Bioethics and Humanities, Salt Lake City, UT, October 26-29, 2000.

Lyerly AD, Socol M, Cefalo RC, Fogarty L, Sugarman J. Attitudes of Maternal-Fetal Specialists Concerning Maternal-Fetal Surgery, Society for Maternal Fetal Medicine, 21st Annual Meeting, Reno NV, February 9, 2001.

Lyerly AD, Anderson J. HIV and Assisted Reproduction: Clinical and Ethical Considerations. Johns Hopkins Division of Reproductive Endocrinology Lecture Series, Baltimore MD, March 8, 2001.

Lyerly AD. HIV and Assisted Reproduction. Women's Issues in HIV. Baltimore, MD, July 26-27, 2001.

Lyerly AD. Ethical Dilemmas Associated with the Inclusion of Women in Clinical Research. Science Meets Reality: Recruitment and Retention of Women in Clinical Studies, and the Critical Role of Relevance. Office for Research in Women's Health, National Institutes of Health, Washington DC, January 6-9, 2003.

Holder A, **Lyerly AD**, Joyce K (panelists). Roe v. Wade at 30: Where Has it Been, What is it Doing, and Where is it Going? Center for the Study of Medical Ethics and Humanities Lecture Series in Medicine. Duke University, Durham NC, January 22, 2003.

Lyerly AD. Ethical Issues in Obstetrics and Gynecology. Grand Rounds, Duke University Medical Center, Department of Obstetrics and Gynecology, February 19, 2003.

Lyerly AD. A Quantitative Study of Individuals' Attitudes Regarding their own Cryopreserved Embryos. Steering Committee Meeting of the Reproductive Medicine Network, NICHD. Rockville, MD. September 9, 2003.

Holder AR, **Lyerly AD** (panelists). Thinking on Abortion in the 21st Century: History, Law and Ethics. Abortion: Research, Ethics and Activism. Sallie Bingham Center for Women's History and Culture. Duke University, Durham, NC. October 31-November 1, 2003.

Lyerly AD. Ethics in Obstetrics and Gynecology: Lessons from Maternal-Fetal Surgery. F. Bayard Carter Society of Obstetricians and Gynecologists Annual Meeting. Durham, NC. November 14, 2003.

Lyerly AD. Individuals Attitudes Regarding their own Cryopreserved Embryos. Panelist with R. Faden, D. Walmer, L. Knowles, L. Andrews in symposium: Frozen In Place: Advancing the Debate about Disposition of Cryopreserved Embryos. Center for Genome Ethics Law and Policy, Duke University, Durham, NC, January 14, 2004.

Lyerly AD. Ethics and Reproductive Medicine: Maternal-Fetal Surgery. Greenwall Fellowship Program Fellows Lecture, Johns Hopkins School of Public Health, Baltimore, MD, January 20, 2004.

Lyerly AD. Ethical Issues in Reproductive Medicine. Duke Women's Health Seminar Series, Duke University, Durham, NC, April 19, 2004.

Lyerly AD, Brelsford E, Bankowski B, Faden R, Wallach E. A qualitative study of individuals' attitudes regarding their cryopreserved embryos. IFFS 18th World Congress on Fertility and Sterility. Montreal, Quebec, May 28, 2004.

Lyerly AD, Doron M. Ethical Decisionmaking with Assisted Reproduction and Multiple Births. Dialogues in Neonatal/Perinatal Medicine. Durham, NC. September 10, 2004.

Lyerly AD, Brelsford E, Steinhauser K, Faden R, Wallach E. A qualitative study of individuals' attitudes regarding their cryopreserved embryos. Womens Health Interdisciplinary Research Symposium, National Institutes of Health, Bethesda, MD, October 4, 2004.

Hogan B, **Lyerly AD,** Holder AR. Stem Cells: Scientific, Ethical and Legal Issues. Duke University Alumni Weekend. Durham, NC, April 15, 2005.

Lyerly AD. Ethical Issues in Reproductive Health. The Robert Wood Johnson Foundation Summer Medical Education Program. Duke University, Durham, NC, July 13, 2005.

Lyerly AD. Ethical Issues in Obstetrics and Gynecology. Grand Rounds, Department of Obstetrics and Gynecology, Duke University Medical Center, Durham, NC, November 16, 2005.

Lyerly AD. Ethical Issues in Perinatal Medicine. 48th Annual Angus McBryde Symposium, Chapel Hill, NC, December 8, 2005.

Young L, **Lyerly AD.** Ethical and Regulatory aspects of Stem Cell Research. Duke/British Council Stem Cell Workshop, Duke University, Durham, NC, February 22, 2006.

Lyerly AD. Research in Reproductive Medicine: Ethical Issues. NICHD CREST Seminar, National Institutes of Health, Bethesda, MD, March 4, 2006.

Lyerly AD (Obstetrics and Gynecology Risk Research Group). Distortions of Risk in Obstetrical Decision Making. UNC-Duke Bioethics Group. Chapel Hill, NC, April 13, 2005.

Wilkinson J, **Lyerly AD**, Whetten K, Vangsnes N. Obstetric Fistula in Niger: A Multi-University Collaboration and the Duke Obstetric Fistula Working Group. Duke Global Health Day, Duke University, Durham NC, April 2006.

Lyerly AD, Harris LH, Armstrong EA, Kukla R, Kuppermann MK, Little MO, Mitchell LM. Distortions of Risk in Obstetrical Decision Making. American College of Obstetricians and Gynecologists Annual Clinical Meeting, Washington DC, May 8 2006.

Lyerly AD. Public Policies, Private Lives: Law, Ethics and Reproductive Medicine. The Robert Wood Johnson Foundation Summer Medical Education Program. Duke University, Durham, NC, June 28, 2005.

Myers ER, **Lyerly AD.** Reproductive Risks: How do we Measure them, How do we Minimize them, and Should we Even Try? Duke/OHRP Conference: Crossing the Line: What is Acceptable Risk? Research Triangle Park, NC, September 25, 2006.

Brown S, **Lyerly AD**, Little M, Lantos J. The Fetus as Patient: Ethical Implications of Innovations in Maternal-Fetal Care. American Society of Bioethics and Humanities, Denver, CO, October 28, 2006.

Harris L, **Lyerly AD**, Little M, Kukla R, Armstrong E. Distortions of Risk in Decision Making Around Pregnancy. National Advocates for Pregnant Women Summit to Ensure the Humanity of Pregnant and Birthing Women. Atlanta, GA, January 18, 2007.

Donovan PJ, Hall ZW, Battey J, **Lyerly AD.** How Will Stem Cell Research Be Sustained? American Association for the Advancement of Science Annual Meeting. San Francisco, CA, February 18, 2007.

Lyerly AD. The Good Birth. University of North Carolina Program in the Humanities, Motherhood and Medicine: Myths, Midwifery, and Modern Practice. Chapel Hill, NC, May 4, 2007.

Lyerly AD. Reproductive Endocrinology Research: What Makes it Ethical? NICHD CREST Seminar, National Institutes of Health, Bethesda, MD, July 30, 2007.

Lyerly AD. Procreative Responsibility and the Ethics of Stem Cell Research. Humanities in Medicine Lecture Series. Duke University, Durham, NC, September 26, 2007.

Lyerly AD. Cultural and Religious Differences in Attitudes toward Therapeutic Cloning and Egg Donation. National Academy of Sciences' Sackler Colloquium, Irvine, CA, October 8, 2007.

Lyerly AD. Little MO, Faden RR. The Second Wave: A Moral Framework for Clinical Research with Pregnant Women. American Society for Bioethics and Humanities. Washington, DC. October 21, 2007.

Lyerly AD. New Perspectives on the Ethics of Stem Cell Research. Quintiles Transnational, Research Triangle Park, NC, November 13, 2007.

Lyerly AD. Procreative Responsibility, Parenting and the Ethics of Stem Cell Research. Pediatrics Grand Rounds. Duke University. December 11, 2007.

Lyerly AD. Fertility Patients' Preferences for Disposition of IVF Embryos. Stem Cell Research: Understanding the Controversies. Georgia State University College of Law, Center for Law, Health and Society. Atlanta, GA, January 10, 2008.

Lyerly AD. Fertility Patients' Preferences for Disposition of Cryopreserved Embryos. Obstetrics and Gynecology Grand Rounds, Duke University, Durham, NC, February 20, 2008.

Lyerly AD. Procreative Responsibility and the Ethics of Stem Cell Research. National Institutes of Environmental Health Sciences, Research Triangle Park, NC, March 6, 2008.

Lyerly AD (panel with J Kurtzberg and M Hughes) Ethics of Pre-Birth Diagnosis. Ethics of Cellular Therapy Conference. Durham, NC, June 16-17, 2008.

Lyerly AD, Minkoff H (Discussants), **Hale R** (Moderator). Ethical Issues Faced in an Ob-Gyn Practice. ACOG Update Program 2008; 34(3).

Lyerly AD, Nancy E. Transfer Tales: Highlights from the Good Birth Project. American Association of Birth Centers Birth Institute. Tucson, AZ. September 6, 2008.

Lyerly AD (panelist with F Curlin and H Brody). Conscience in the Practice of the Health Professions: Mapping the Contemporary Domain. Testimony before the President's Council on Bioethics, Arlington, Virginia, September 11, 2008.

Schoenfeld T, Kukla R, Amoura J, **Lyerly AD**, Little M (panel). 'Reproducing' Risk: Women and Clinical Research. PRIM&R Annual Meeting, Orlando, FL. November 19, 2008.

Lyerly AD. Conscience in the Practice of the Health Professions: An Ongoing Debate. Trent Center Colloquium, Duke University. December 9, 2008.

Lyerly AD. Research Subjects: Females Left Behind? Parr Center for Ethics, University of North Carolina, Chapel Hill, North Carolina, February 26, 2009.

Lyerly AD. The Second Wave: Toward Responsible Inclusion of Pregnant Women in Biomedical Research. Ethics, Technology, and Pregnant Bodies. University of Groningen. Groningen, the Netherlands, March 30, 2009.

Lyerly AD. The Second Wave: Introduction to the Second Wave Workshop. Georgetown University, Washington DC, April 29, 2009.

Lyerly AD. Autonomy and Birth. Duke-UNC Bioethics Group Meeting. Chapel Hill, NC. May 14, 2009.

Lyerly AD. The Second Wave: Toward Responsible Inclusion of Pregnant Women in Biomedical Research. Duke University Department of Obstetrics and Gynecology Grand Rounds, Durham NC. May 27, 2009.

Namey EB, Lyerly AD. Finding Control: Another Look at "Control" and Birth in America. Society for Medical Anthropology Annual Meeting. Yale University. New Haven, CT. September 25, 2009.

Lyerly AD. Pregnancy and Clinical Research. IRB Lunch and Learn. Duke University. Durham, NC. November 10, 2009.

Lyerly AD, White D, Uhl K, Norsigian J(panclists). Ethical, Regulatory and Practical Issues of Research Involving Women. PRIM&R Annual Meeting. Nashville, TN. November 16, 2009.

Lyerly AD. Women's Voices and Reproductive Medicine: What Remains. University of North Carolina Chapel Hill Department of Social Medicine Seminar. Chapel Hill, NC, February 8, 2010.

Lyerly AD. Reproducing Risk? Pregnant Women and Biomedical Research. University of Minnesota Center for Bioethics Seminar Series. Minneapolis, MN, February 12, 2010.

Lyerly AD. The Medical Ethics of Vaginal Birth After Cesarean. National Institutes of Health Consensus Development Conference on Vaginal Birth After Cesarean, Bethesda, MD, March 9, 2010.

Lyerly AD. Risk and the Pregnant Body: Challenges to Evidence-Based Therapeutics During Pregnancy. Wake Forest University Center for Bioethics Inaugural Seminar. Wake Forest University, Winston Salem, NC, March 22, 2010.

Lyerly AD. Ethics and the Responsible Inclusion of Pregnant Women in Clinical Research (invited panel). Society of Gynecologic Investigation Annual Meeting. Orlando, FL, March 25, 2010.

Lyerly AD. Women's Voices and Reproductive Medicine: What Remains. Conversations in Bioethics, Case Western Reserve University Medical Center. Cleveland, OH, April 20, 2010.

Lyerly AD. Women's Voices and Reproductive Medicine: What Remains. Grand Rounds, March of Dimes, White Plains, NY, May 27, 2010.

Lyerly AD. Inclusion of Pregnant Women in Research. Greenwall Fellows Seminar, Kennedy Institute for Ethics, Georgetown University, October 4, 2010.

Lyerly AD. When and How Should Pregnant Women Be Allowed to Participate in Research? Maternal and Pediatric Drug Safety Conference, Drug Information Association, Bethesda MD, October 13, 2010.

Lyerly AD. Direct Benefit to Pregnant Women. Office for Research on Women's Health Research Forum. Issues in Clinical Research: Enrolling Pregnant Women. National Institutes of Health, Bethesda MD, October 18, 2010.

Lyerly AD. Diagnostic Radiology in Pregnancy: Ethics, Risk and the Pregnant Body. Diagnostic Imaging of the Pregnant Patient in the Emergency Department or other Acute Care Setting. University of Oklahoma, Tulsa OK, November 4, 2010.

Lyerly AD. Toward Informed Choices During Pregnancy: Opportunities for and Challenges to Fair Inclusion of Pregnant Women in Biomedical Research. Panelist with Wolf S., Oberman M, Ikemoto L, Fentiman L; Joan Krause (organizer). Women's Choices, Women's Voices: Legal Regimes and Women's Health. American Association of Law Schools Annual Meeting, San Francisco, CA, January 7, 2011.

Lyerly AD. Beyond Refusal: Conscience and the Moral Contours of Abortion Provision. Faculty Forum. University of North Carolina at Chapel Hill. Chapel Hill, NC, February 1, 2011.

Lyerly AD. Panelist with Karla FC Holloway, Alondra Nelson, Charmaine Royal and Harriet A. Washington. Private Bodies. Atelier@Duke: The Idea of Archive; Producing and Performing Race. Duke University, Durham NC, February 26, 2011.

Lyerly AD. Responsible Inclusion of Pregnant Women in Research. TraCS Ethics Grand Rounds. University of North Carolina at Chapel Hill, Chapel Hill, NC, March 17, 2011.

Gray BA, **Lyerly AD**, Namey E, Swamy G. H1N1 Vaccination During Pregnancy: A Qualitative Study of Women's Decision to Accept a Novel Vaccine. Society of Gynecological Investigation Annual Meeting, Miami Beach FL, March 18, 2011.

Lyerly AD. Healthcare Professionals, Conscience, and Women's Reproductive Health. ASBH National Undergraduate Bioethics Conference. Duke University, Durham NC, March 21, 2011.

Lyerly AD, Brandon AR. Enhancing Informed Consent for Pregnant Women in Research: Why and How? Bioethics at UNC (BUNC) Meeting. University of North Carolina at Chapel Hill, Chapel Hill, NC, April 26, 2011.

Lyerly AD. Ethics and Guideline Development: Implications for the Supporting Intended Vaginal Birth Initiative. Perinatal Quality Collaborative. Raleigh, NC, June 7, 2011.

Lyerly AD. The Ethics of Testing New Drugs in Pregnant Women. Gerald R. Briggs Research Symposium. 24th Annual Conference of the Organization of Teratology Information Specialists. San Diego, CA, Jun 26, 2011.

RESEARCH GROUPS

The Second Wave Working Group, Cofounder with Maggie Little and Ruth Faden

Multidisciplinary group addressing the under-representation of pregnant women in biomedical research from the perspectives of ethics, science, and health policy

The Oncofertility Consortium, Ethics Advisory Board

Consortium of scholars from law, policy, and ethics to analyze the ethical issues raised by fertility preservation in the context of fertility limiting diseases. Part of NIH roadmap grant awarded to Teresa Woodruff, PhD, for the study of oocyte preservation.

The Obstetrics and Gynecology Risk Research Group, Cofounder with Maggie Little

Multidisciplinary group of scholars from medicine, epidemiology/biostatistics, social science and humanities including philosophy and ethics, who the ethics of risk assessment and communication in reproductive medicine

The Duke Obstetrics Fistula Working Group, Member

Multidisciplinary collaborative group examining the ethical issues associated with approaches to obstetric fistula in developing countries.

The North Carolina Research Collaborative on Mode of Delivery, Member

Research collaborative between Duke, NCSU and UNC to explore the issues around mode of delivery and identify and address research questions pertaining to practice and policy
The UNC-Duke Bioethics Research Group, Member
Quarterly seminar of area scholars dedicated to pondering and sharing questions, ideas, and work in progress in bioethics-related research.

PROFESSIONAL ORGANIZATIONS/PARTICIPATION

Member, NIH Advisory Committee to the Director Working Group on Human Embryonic Stem Cell Review, 2011
Co-Chair, American Society for Bioethics and Humanities Program Committee, 2008-2009
Chair, American College of Obstetricians and Gynecologists Committee on Ethics, 2007-2009
ACOG Liaison, American Academy of Pediatrics, Committee on Bioethics, 2007-2009
Vice Chair, American College of Obstetricians and Gynecologists, Committee on Ethics, 2005-2007
Member, American College of Obstetricians and Gynecologists Task Force on Genetic Screening, 2005-2006
Member, American College of Obstetricians and Gynecologists Committee on Ethics, 2002-2005
Fellow, American College of Obstetricians and Gynecologists, 2003-present
Participant, ACOG Leadership in Women's Health Policy Program, 2000
Member, American Society of Bioethics and Humanities, 1999-present
Member, The Hastings Center, 1999-present
Member, Feminist Approaches to Bioethics Network, 1999-present

CONSULTANT APPOINTMENTS

Consultant for Research Ethics, Quintiles Transnational, 2007
Ethics Consultant, Family Health International Non-surgical Sterilization Team, 2006
Member, Family Health International, Protection of Human Subjects Committee, 2006-present
Member, Reproductive Genetics Advisory Committee, Genetics and Public Policy Center, Johns Hopkins University Berman Bioethics Institute, 2003-present
Staff, National Bioethics Advisory Commission, 2000

UNIVERSITY COMMITTEES

Duke University Stem Cell Research Oversight Committee, Member, 2010
Kenan Institute of Ethics Faculty Council, Member, 2008-present
Duke University Institutional Review Board, Member, 2003-2008
Duke University Clinical Sciences Faculty Council Member, 2003-2006
Duke University Hospital Ethics Committee, Member 2002-2007
Duke University Medical Humanities Bioethics and Law Curriculum Committee, Member 2002-2004
Johns Hopkins Assisted Reproductive Technologies Oversight Committee, Member, 1999-2001

COURSES TAUGHT

Practice Course, Duke University School of Medicine: Conscience and Doctoring, 2010

Women and Health Law, University of North Carolina (Joan Krause, Course Instructor). Visiting Professor: Women and Health Research, 2010.

English 169: Bioethics and Narrative, Duke University (Karla Holloway, Course Instructor): Visiting Professor: Reproduction and Mourning, 2009

Philosophy 292, Duke University: Bioethics (with Gopal Sreenivasan, Jeff Baker, Margaret Humphreys, Ross McKinney), 2009

Medical Ethics and Humanities in Obstetrics and Gynecology (second year medical student clerkship), Duke University School of Medicine, 2009, 2010

Master Class, University of Groningen, the Netherlands: Technology and Pregnant Bodies, 2009

Capstone Course (fourth year medical students), Duke University School of Medicine: The Medical Transformation of Childbirth, 2008, 2009, 2010

Exploring Medicine: Duke University School of Medicine (Dennis Clements, Course Director): Conscience, Culture and the Health Professions, 2009

Robert Wood Johnson Summer Medical and Dental Education Program, Duke University: Ethics and Choices in Reproductive Health, 2007, 2008, 2009, 2010

AMA Health Policy Committee: Duke University Medical Student Lecture, Health Policy, Conscience and the Health Professions: Ethical Issues, 2009

Oscher Lifelong Learning Institute: Duke University (Angela Holder, Course Instructor), Visiting Professor: Reproductive Issues: Who Decides?, 2008

General Clinical Research Center Training, The Responsible Conduct of Research, Moderator, 2006

Ethics in Obstetrics and Gynecology, Course coordinator and lecturer for Duke University Obstetrics and Gynecology residents ethics curriculum, 2005-present

Master Clinician Week, Duke University School of Medicine, 1st year medical student discussion on physician-patient encounter, 2005

Ethical issues in Reproductive Genetic Testing, Duke University School of Medicine, 2004

Womens Studies 260, Duke University: Gender and Bioethics, *Interdisciplinary Debates Project*, 2003

Ethical Issues Associated with Neural Tube Defects, Duke University School of Medicine, Medical student lecture, interterm course, 2003

Journal Club: Cesarean by Patient Choice, Duke University Division of Urogynecology, 2003

Elkins Baltimore OB/GYN Ethics Retreat: Faculty, Johns Hopkins University, April 2000, 2001

STUDENTS MENTORED

Eleni Boussios, Duke University Medical School, Second Year Medical Student, Co-mentored research (with Evan Myers, MD) Third Year MPH program, 2003-2004

Tracy Egharbeva, Duke University, Senior (undergraduate), Mentored research for Human Development Certificate, 2005

Rashmi Kudesia, Duke University Medical School, Third Year Medical Student. Mentored Third Year Research Project and NIH Roadmap Scholarship, 2006-2007

Christie Milleson, Duke University undergraduate, Taught independent study (WST) Maternal Health in Costa Rica, 2007

Sarah Wilkins, Duke University Medical School, Third Year Medical Student, Mentored on Third Year Research Project, 2006-2008

Brownsync Tucker-Edmonds, MD, Duke University, Third Year Resident, Mentored for third year research project, 2007-2008

Jennifer Wu, MD, BIRWCH Scholar, Duke Department of Obstetrics and Gynecology, Co-Mentor for career development award, 2008-10.

Jeremy Block, Duke University, PhD/MPP Student, Committee Member for Master's Project, 2008-2009

Beverly Gray, Duke University, Third Year Resident, Mentored for project of preferences about H1N1 Vaccination during pregnancy, 2009-2010

Priyanka Sista., Duke University undergraduate. Research mentor for senior honors thesis, 2010

Anna Brandon, PhD, UNC Assistant Professor. Research mentor for K-award, 2011-present

PEER REVIEW

American Journal of Bioethics, American Journal of Obstetrics and Gynecology, American Journal of Managed Care, American Journal of Public Health, Birth, Canadian Medical Association Journal, Cell Stem Cell, Fertility and Sterility, Genetics in Medicine, Hastings Center Report, Human Reproduction, International Journal of Gynecology and Obstetrics, IRB, Journal of Genetic Counseling, Journal of the History of Medicine, Journal of Perinatology, Kennedy Institute of Ethics Journal, Milbank Quarterly, New England Journal of Medicine, North Carolina Medical Journal, Obstetrics and Gynecology, Prenatal Diagnosis, Social Science and Medicine, Women's Health Issues

EDITORIAL BOARDS

Birth

Fertility Today

LICENSURE/CERTIFICATION

North Carolina Medical License #200101085, issued 8/16/01

American Board of Obstetrics and Gynecology: Diplomate, November 2002

American College of Obstetricians and Gynecologists: Fellow, December 2003-present